

REMARKS

By this response, Applicant cancels claim 4, without prejudice or disclaimer of the subject matter therein, amends claims 1, 2, 7, 8, and 12 to more appropriately define the invention, and adds new claims 16 and 17 to protect additional aspects of the invention. Claims 1-3 and 5-17 are therefore pending. Applicant also amends the title of the invention and a heading in the specification.

In the Office Action of March 22, 2004<sup>1</sup> (“OA”), claims 8-15 were allowed. In addition, the specification was objected to for informalities; claims 1-3 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,452,473 to *Weiland et al.* (“*Weiland*”) in view of U.S. Patent No. 5,497,505 to *Koohgoli et al.* (“*Koohgoli*”); claims 4 and 5 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Weiland* in view of *Koohgoli* and further in view of U.S. Patent No. 5,752,197 to *Rautiola et al.* (“*Rautiola*”); claim 6 was rejected under 35 U.S.C. § 103(a) as being unpatentable over *Weiland* in view of *Koohgoli* and further in view of U.S. Patent No. 6,366,778 to *Bender et al.* (“*Bender*”); and claim 7 was rejected under 35 U.S.C. § 103(a) as being unpatentable over *Rautiola* in view of *Koohgoli*. Applicant acknowledges, with appreciation, the allowance of claims 8-15 and addresses the rejections and objections, as well as the new claims, below.

Prior to the addressing the rejections and objections, Applicant points out the following ambiguities in the Office Action. The Office Action states: “[c]laims 1-15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Weiland ... in view of Koohgoli ...” (OA at 2). The Office Action, however, indicates that claims 8-15 are allowed (OA at 6) and does not include a

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<sup>1</sup> The Office Action contains a number of statements reflecting characterizations of the related art and the claims. Regardless of whether or not any such statement is identified herein, Applicant declines to automatically subscribe to any statement or characterization in the Office Action.

rejection of these claims. Further, while the rejection presented in the Office Action with respect to claims 1-3 is in fact based on *Weiland* and *Koohgoli*, claims 4-7 are rejected based on different grounds. Accordingly, Applicant assumes the above-noted statement should refer to claims 1-3, not claims 1-15.

The Office Action also states: “[c]laim 4 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Weiland in view of Koohgoli … and further in view of Rautiola. Applicant notes, however, that claims 4 and 5 are in fact rejected based on these references. Should the Examiner continue to dispute the patentability of the claims, Applicant requests clarification in the next Action as to the above-noted ambiguities.

### **Regarding the Specification**

The Examiner objected to the Specification, alleging that “[a] heading is missing for description of the drawings” (OA at 2). The Examiner also alleged that the title is not descriptive. Contrary to the Examiner’s allegation, a heading is not missing for the description of the drawings (see Specification, page 4, line 25). Nonetheless, Applicant amends that heading to read “Brief Description of the Drawings.” Applicant also amends the title so that it more appropriately describes the claimed invention. Applicant therefore deems the objections to the Specification overcome.

### **Rejection of claims 1-3 under 35 U.S.C. § 103(a)**

Applicant traverses the rejection of claims 1-3 under 35 U.S.C. § 103(a) because a *prima facie* case of obviousness has not been established based on *Weiland* and *Koohgoli*. To establish *prima facie* obviousness under 35 U.S.C. § 103(a), each of three requirements must be met. First, the references, taken alone or in combination, must teach or suggest each and every element recited in the claims. See M.P.E.P. § 2143.03 (8th ed. 2001). Second, there must be some suggestion or motivation, either in the reference(s) or in the knowledge generally available

to one of ordinary skill in the art, to combine or modify the reference(s) in a manner resulting in the claimed invention. Third, a reasonable expectation of success must exist. Moreover, each of these requirements must “be found in the prior art, and not be based on applicant’s disclosure.” M.P.E.P. § 2143 (8th ed. 2001).

A *prima facie* case of obviousness has not been established because, among other things, *Weiland* and *Koohgoli*, whether taken alone or in combination, fail to teach or suggest each and every element recited in Applicant’s claims.

Independent claim 1, as currently presented, recites, *inter alia*:

a limiter configured to set a first maximum value of an output of the gain controlled amplifier according to an up-link frequency specified by the base station, wherein the first maximum value corresponds to a first frequency of the first radiocommunication system that is close to a frequency band assigned to a second radiocommunication system and is set lower than maximum values of the gain controlled amplifier corresponding to other frequencies of the first radiocommunication system not close to the frequency band assigned to the second radiocommunication system.

*Weiland* fails to teach or suggest at least the above-noted features.

*Weiland* is directed to “power control in a radiotelephone system” (col. 1, lines 8-11). In *Weiland*’s system, the output of power amplifier 201 (Tx UHF) is kept at a specified value, even if the transmit frequency is varied (see Fig. 2). The *Weiland* system also includes a power amplifier limit threshold control (209) that determines a “maximum gain setting” for amplifier 201. According to *Weiland*, this maximum gain setting is a fixed value that “can be hard coded” (col. 4, lines 52-68; *see* Fig. 5).

In contrast, claim 1 recites “a limiter configured to set a ... maximum value of an output of the gain controlled amplifier according to an up-link frequency specified by the base station.” According to claim 1, the limiter sets a first maximum output value for a frequency of the first radiocommunication system that is close to a frequency band assigned to a second

radiocommunication system and the first maximum value is lower than maximum output values corresponding to other frequencies of the first system not close to the frequency band assigned to the second system. *Weiland* does not teach or suggest at least these features. In fact, the Examiner acknowledges that *Weiland* does not disclose “an uplink frequency specified by the base station.”

*Koohgoli* fails to cure *Weiland*’s deficiencies. *Koohgoli* describes performing a “call set-up in radio systems with DCA [dynamic channel allocation]” (col. 2 lines 20-32). Although *Koohgoli* mentions a base station (11b) that scans “all available traffic channels [and forwards a] list of frequencies or traffic channels … to subscriber terminal,” the reference does not teach or suggest the “limiter” currently recited in claim 1.

*Weiland* and *Koohgoli* therefore fail, alone and in combination, to teach or suggest each and every element recited in claim 1. For at least this reason, a *prima facie* case of obviousness has not been established with respect to claim 1.

Moreover, the Examiner has not established a *prima facie* case of obviousness since there is no motivation to combine the references. Determinations of obviousness must be supported by evidence on the record. See *In re Zurko*, 258 F.3d 1379, 1386 (Fed. Cir. 2001) (finding that the factual determinations central to the issue of patentability, including conclusions of obviousness by the Board, must be supported by “substantial evidence”). The desire to combine references must be proved with “substantial evidence” that is a result of a “thorough and searching” factual inquiry. *In re Lee*, 277 F.3d 1338, 1343-1344 (Fed. Cir. 2002) (quoting *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1351-52).

In this case, the Office Action provides no “substantial evidence” to support the attempted combination of *Weiland* and *Koohgoli*. The Examiner merely provides a description

of how *Koohgoli* allegedly teaches certain features not found in *Weiland* without a proper motive for combining *Koohgoli* with *Weiland*. In particular, the Examiner simply alleges (OA at 3):

It would have been obvious to one of ordinary skill in the art ... to modify the invention of *Weiland*, and have the uplink frequency specified by the base station, as taught by *Koohgoli*, thus allowing frequencies to be assigned that cause minimal interference, as discussed by *Koohgoli* ....

These conclusory statements in the Office Action are not properly supported by facts on the record and do not evidence that a skilled artisan would have been motivated to combine the references. While *Koohgoli* mentions that a “base station passes a list of available traffic channels which have low interference from its perspective to the subscriber terminal” (col. 2, lines 40-45), the Examiner has not shown, by substantial evidence, that a skilled artisan considering the cited references, and not having the benefit of Applicant’s disclosure, would have been motivated to combine the references in a manner resulting in Applicant’s claimed combination.

Applicant calls attention to M.P.E.P. § 2143.01, which makes clear that the “mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.” As explained above, the Examiner does not show that the cited art “suggests the desirability” of the combination. No objective reason for combining the applied art, other than the Examiner’s attempt to meet the terms of claim 1, has been established. One of ordinary skill in the art would have appreciated, at the time of the invention, that *Weiland* and *Koohgoli* do not suggest the Examiner’s proposed combination, absent the benefit of Applicant’s disclosure.

M.P.E.P. § 2143 further instructs that the requirements for establishing *prima facie* obviousness must “be found in the prior art, and not be based on applicant’s disclosure.”

M.P.E.P. § 2143 (8th ed. 2001). As M.P.E.P. § 2142 articulates:

Knowledge of applicant's disclosure must be put aside....  
[I]mpermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art.

Applicant submits that the conclusions in the Office Action were not reached based on facts gleaned from the cited references and that, instead, Applicant's claims were improperly used to reconstruct the prior art. A skilled artisan would not have been motivated, without consulting Applicant's disclosure, to combine the teachings of *Weiland* and *Koohgoli*. Neither of these references teaches or suggests combining their respective teachings as alleged in the Office Action. The conclusions in the Office Action, therefore, constitute improper hindsight reasoning.

For at least the reasons advanced above, the requisite motivation to combine is lacking. Moreover, the Examiner has not shown, by substantial evidence, that there is a reasonable expectation of success in combining *Weiland* and *Koohgoli*. The Examiner has not shown that the alleged combination would be feasible given the disclosures of the references.

Because the required motivation to combine the applied references is lacking, and since the applied references (even if combined) fail to teach or suggest each and every claim recitation, *prima facie* obviousness has not been established with respect to claim 1. The rejection of claim 1 under 35 U.S.C. § 103(a) should therefore be withdrawn. The rejection of claims 2 and 3 under 35 U.S.C. § 103(a) should be withdrawn as well, at least because of the respective dependence of those claims from base claim 1. Accordingly, Applicant requests withdrawal of the rejection of claims 1-3 under 35 U.S.C. § 103(a) and the timely allowance of these claims.

**Rejection of claims 4 and 5 under 35 U.S.C. § 103(a)**

The rejection of claim 4 under 35 U.S.C. § 103(a) is rendered moot by the cancellation of that claim. Further, Applicant traverses the rejection of claim 5 under 35 U.S.C. § 103(a)

because a *prima facie* case of obviousness has not been established based on *Weiland*, *Koohgoli*, and *Rautiola*.

Claim 5 depends from claim 1 and therefore includes all of the features recited in claim 1. A *prima facie* case of obviousness has not been established with respect to claim 5 for at least the reasons presented above in connection with claim 1.

Moreover, *Rautiola* does not cure the deficiencies of *Weiland* and *Koohgoli*. *Rautiola* is directed to “adjusting transmission power in a mobile radio system” (Abstract). In *Rautiola*’s system, a base station measures the quality of transmission from a subscriber station and informs an exchange of the measured quality (col. 4, lines 33-41). The exchange then selects “the lowest possible power level for use in radio traffic [between the two stations] on the basis of the quality of transmission ...” (Abstract; col. 4, lines 41-44). *Rautiola* also mentions that the exchange may “[retrieve] from its database [a] ... list of base stations subject to interference that correspond to [the selected] ... power level and [prevent] ... these base stations from using the same channel ...” (col. 5, lines 21-33). *Rautiola* does not teach or suggest at least a “limiter” as currently recited in claim 1. *Rautiola* merely mentions selecting a lowest possible power level based on the quality of the communication. The reference does not teach or suggest making such a selection based on a communication frequency.

*Weiland*, *Koohgoli*, and *Rautiola*, therefore fail, alone and in combination, to teach or suggest each and every element recited in claim 1 and therefore required by claim 5. For at least this reason, a *prima facie* case of obviousness has not been established with respect to claim 5.

Further, aside from the lack of motivation with respect to *Weiland* and *Koohgoli*, the requisite motivation for combining *Rautiola* with *Weiland* or *Koohgoli* is lacking. The Examiner has not shown in the Office Action, by substantial evidence, that a skilled artisan considering the

cited references, and not having the benefit of Applicant's disclosure, would have been motivated to combine the references in a manner resulting in Applicant's claimed combination. Again, the Examiner merely provides a description of how *Rautiola* allegedly teaches certain features not found in *Weiland* and *Koohgoli* without a proper motive for combining *Rautiola* with *Weiland* or *Koohgoli*.

Because the required motivation to combine the applied references is lacking, and since the applied references (even if combined) fail to teach or suggest each and every claim recitation, *prima facie* obviousness has not been established with respect to claim 5. The rejection of claim 5 under 35 U.S.C. § 103(a) should therefore be withdrawn. Accordingly, Applicant requests withdrawal of the rejection of claim 5 under 35 U.S.C. § 103(a) and the timely allowance of this claim.

**Rejection of claim 6 under 35 U.S.C. § 103(a)**

Applicant traverses the rejection of claim 6 under 35 U.S.C. § 103(a) because a *prima facie* case of obviousness has not been established based on *Weiland*, *Koohgoli*, and *Bender*.

Claim 6 depends from claim 1 and therefore includes all of the features recited in claim 1. A *prima facie* case of obviousness has not been established with respect to claim 6 for at least the reasons presented above in connection with claim 1.

Moreover, *Bender* does not cure the deficiencies of *Weiland* and *Koohgoli*. *Bender* is directed to "synchronized power control in a multiple access communications system" (col. 1, lines 20-21). In *Bender*'s system, "the power levels at which transceivers in active communication with a single mobile unit are transmitting may be synchronized" (col. 4, lines 46-49). *Bender* does not teach or suggest, however, at least a "limiter" as currently recited in claim 1.

*Weiland, Koohgoli, and Bender*, therefore fail, alone and in combination, to teach or suggest each and every element required by claim 6. For at least this reason, a *prima facie* case of obviousness has not been established with respect to claim 6.

Further, aside from the lack of motivation with respect to *Weiland* and *Koohgoli*, the requisite motivation for combining *Bender* with *Weiland* or *Koohgoli* is lacking. The Examiner has not shown in the Office Action, by substantial evidence, that a skilled artisan considering the cited references, and not having the benefit of Applicant's disclosure, would have been motivated to combine the references in a manner resulting in Applicant's claimed combination.

For at least the foregoing reasons, a *prima facie* case of obviousness has not been established with respect to claim 6. The rejection of claim 6 under 35 U.S.C. § 103(a) should therefore be withdrawn. Accordingly, Applicant requests withdrawal of the rejection of claim 6 under 35 U.S.C. § 103(a) and the timely allowance of this claim.

**Rejection of claim 7 under 35 U.S.C. § 103(a)**

Applicant traverses the rejection of independent claim 7 under 35 U.S.C. § 103(a) because a *prima facie* case of obviousness has not been established based on *Rautiola* and *Koohgoli*.

Independent claim 7, although of different scope, includes subject matter similar to that noted above in claim 1. Specifically, claim 7, as currently presented, recites a method including:

receiving an up-link frequency specified by a base station ... and  
setting a first maximum value of an output of the gain controlled amplifier according to the specified up-link frequency, wherein the first maximum value corresponds to a first frequency of the first radiocommunication system close to a frequency band assigned to a second radiocommunication system and is lower than other maximum values of the gain controlled amplifier corresponding to other frequencies of the first radiocommunication system not close to the frequency band assigned to the second radiocommunication system.

For at least the reasons presented above in connection with claim 5, *Rautiola* does not teach or suggest at least the “setting” recited in claim 7.

*Koohgoli*, moreover, fails to cure the deficiencies of *Rautiola*. For at least the reasons presented above in connection with claim 1, *Koohgoli* does not teach or suggest at least the “setting” recited in claim 7. Accordingly, neither *Rautiola* nor *Koohgoli*, nor any combination thereof, teaches or suggests each and every feature recited in claim 7.

Furthermore, the requisite motivation for combining *Rautiola* and *Koohgoli* is lacking. Again, the Examiner merely provides a description of how *Koohgoli* allegedly teaches certain features not found in *Rautiola* without a proper motive for combining *Koohgoli* with *Rautiola*. The Examiner has not shown, by substantial evidence, that a skilled artisan considering the cited references, and not having the benefit of Applicant’s disclosure, would have been motivated to combine the references in a manner resulting in Applicant’s claimed combination. Indeed, no motivation exists for combining *Rautiola* and *Koohgoli* in a manner resulting in the invention defined by claim 7.

For at least the foregoing reasons, a *prima facie* case of obviousness has not been established with respect to claim 7. The rejection of claim 7 under 35 U.S.C. § 103(a) should therefore be withdrawn, and Applicant requests such withdrawal.

### **New claims**

New independent claim 16 recites, *inter alia*:

a limiter configured to set a maximum value of an output of the gain controlled amplifier according to an up-link frequency specified by the base station, wherein the maximum value of the gain controlled amplifier is reduced when the specified up-link frequency is close to a frequency band assigned to a second radiocommunication system.

New independent claim 17 recites, *inter alia*:

a limiter configured to set a maximum output of the gain controlled amplifier for transmission channels associated with the first radiocommunication system according to an up-link frequency specified by the base station, wherein the limiter sets a first maximum value of the gain controlled amplifier for a first channel of the first radiocommunication system that is close to a frequency band assigned to a second radiocommunication system, the first maximum value lower than a second maximum value of the gain controlled amplifier corresponding to a second channel of the first radiocommunication system that is not close to the frequency band assigned to the second radiocommunication system.

Applicant submits that neither *Weiland*, *Koohgoli*, *Rautiola*, nor *Bender*, nor any combination thereof, teaches or suggests at least the above-noted features of claims 16 and 17. Applicant therefore requests the timely allowance of these new claims.

### **Conclusion**

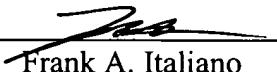
The claimed invention is neither anticipated nor rendered obvious in view of the references cited against this application. Applicant requests the Examiner's reconsideration of the application in view of the remarks presented herein, and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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